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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,025	03/30/2006	Michael Ernest Garrett	M02B127	3961
20411 7590 04/28/2009 The BOC Group, Inc. 575 MOUNTAIN AVENUE MURRAY HILL, NJ 07974-2082				
EXAMINER				
OSTRUP, CLINTON T				
ART UNIT		PAPER NUMBER		
3771				
MAIL DATE		DELIVERY MODE		
04/28/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/543,025

**Applicant(s)**

GARRETT ET AL.

**Examiner**

CLINTON OSTRUP

**Art Unit**

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 1-5 and 7-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is in response to the amendment filed February 4, 2009. As directed by the amendment, claims 1-3, 5 and 7 have been amended, claims 6 has been cancelled. Thus, claims 1-5 and 7-11 are pending in this application.

#### ***Claim Objections***

2. Claims 1-5 & 7-11 are objected to because of the following informalities: Claims 1-5 & 7-11 are objected to as using improper status identifiers. Applicants are reminded to properly indicate the current status of the claims (i.e. currently amended and previously presented). Appropriate correction is required.

3. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered). See: MPEP 714.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 5-11, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiep et al (4,535,767) in view of Lecourt (6,592,848) and further in view of Payton (4,660,555).

Tiep discloses a nasal cannula (10) that can be used for delivering a breathable gas mixture comprising helium and oxygen to a patient, the nasal cannula (10) comprising a length of tubing (22) having a proximal end region (26) that can be used for connecting to a high pressure source of the breathable gas mixture at a pressure in the range of 100 bar to 300 bar and a distal end region (20) connected to at least one nasal administration device (10), wherein the nasal administration device comprises a pair of nasal prongs has at least one orifice (12) that can be used for the expansion of the breathable gas mixture. See: col. 3, lines 35-45 and figures 1-4.

Although Tiep discloses a nasal cannula that is capable of performing the intended use of the apparatus claimed, Tiep lacks the specific teaching of the gases and pressure as claimed and the nasal prong or prongs having a plurality of perforations as claimed.

Lecourt teaches that it is well known to combine helium and oxygen gases together for the treatment of respiratory disorders and teaches that these gases may be packaged between 2 and 300 bar. See: col. 3, lines 43-50 and col. 4, lines 32-45.

Payton teaches a nasal prong (10) having a plurality of perforations (30) that extend from the main passageway to an outer surface which ensure a free and adequate supply of gas in the event that one of the other passageways gets plugged or stopped.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the nasal cannula disclosed by Tiep to deliver the gases taught by Lecourt using nasal prongs with a plurality of perforations as taught by

Payton in order to treat the respiratory system of patients with an easy to use nasal cannula that would ensure gas delivery to a patient even in the event of one or more of the passageways getting plugged or stopped.

Regarding claim 5, Tiep discloses tubing surrounded by protective sheath (18) or (30). See: figures 1-4.

Regarding claim 7, Tiep discloses an apparatus (10) that can be used for administering a breathable gas mixture of helium and oxygen and discloses a supply tank (col. 3, lines 40-41) as a means for supplying breathable gas at a high pressure and a nasal cannula (10) with a length of tubing (22) having a proximal end region (26) which can be used for connecting a high pressure source of the breathable gas mixture at a pressure in the range of 100 bar to 300 bar and a distal end region (20) connected to at least one nasal administration device (10), comprising a pair of nasal prongs, wherein the nasal administration device has at least one orifice (12) that can be used for the expansion of the breathable gas mixture. See: col. 3, lines 35-45 and figures 1-4.

Although Tiep discloses a nasal cannula that is capable of performing the intended use of the apparatus claimed, Tiep lacks the specific teaching of the gases and pressure as claimed as well as a nasal prong with a plurality of perforations.

Lecourt teaches that it is well known to combine helium and oxygen gases together for the treatment of respiratory disorders and teaches that these gases may be packaged between 2 and 300 bar. See: col. 3, lines 43-50 and col. 4, lines 32-45.

Payton teaches a nasal prong (10) having a plurality of perforations (30) that extend from the main passageway to an outer surface which ensure a free and

adequate supply of gas in the event that one of the other passageways gets plugged or stopped.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the nasal cannula disclosed by Tiep to deliver the gases taught by Lecourt using nasal prongs with a plurality of perforations as taught by Payton in order to treat the respiratory system of patients with an easy to use nasal cannula that would ensure gas delivery to a patient even in the event of one or more of the passageways getting plugged or stopped.

Regarding claim 8, Tiep discloses pressurized supply tank for administering a gas. See: col. 3, lines 40-41.

Regarding claims 9 and 11, Lecourt teaches that it has been customary to treat patients with 70-75% helium and 20-25 % oxygen, thus teaching the specific percentages of helium and oxygen, as claimed in claims 9 and 11. See: col. 3, lines 43-50.

Regarding claim 10, Lecourt teaches packaging a combination of helium and oxygen at a pressure between 2 and 300 bar. See: col. 4, lines 32-45.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiep et al (4,535,767) in view of Lecourt (6,592,848) and Payton (4,660,555), as applied to claim 1 above, and further in view of Smart (4,685,456).

The combined references disclose all the limitations of claim 2 except the tubing being coiled.

Smart teaches a self-retracting coiled tube for the delivery of gas to a patient.

See: figure 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the gas delivery tube of Tiep with a self retracting coiled tube as taught by Smart in order to obtain a nasal cannula with a tube that can be easily expanded and contracted to accommodate a patient's movement.

Regarding claims 3-4, the choice of a known material based on its suitability for the intended use is a design consideration well within the skill of the art.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-5 & 7-11 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Curti et al (2002/0043346) & Garrett (3,429,342) which both gas delivery devices.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLINTON OSTRUP whose telephone number is (571)272-5559. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Justine R Yu/  
Supervisory Patent Examiner, Art Unit 3771

/Clinton Ostrup/  
Examiner, Art Unit 3771

